

printheads are increasingly being used, and the invention is believed to provide its greatest advantages when used in conjunction with ink-jet printing.--

Please replace the paragraph beginning at page 6, line 23, with the following rewritten paragraph:



-- Turning to Figure 3, a second embodiment 40 of an ink drying system for high speed printing according to the present invention is shown. The system 40 is similar to the system 10, except that laterally varying drying control is not particularly sought, and instead control is provided in the longitudinal dimension. The orifices 18 of each of the plenums 16 are spaced from one another so as to span entirely the total drying area TDA. The plenums are spaced apart from one another along the longitudinal dimension. Again, each plenum 16 communicates with a source "S" of pressurized gas through a respective fast acting valve 20. In this embodiment, the rate at which drying energy is applied can be tailored to a given laterally extending region of print. Particularly, drying energy is applied to the region by each plenum in succession as the region travels downstream of the printing head. The energy applied to the given region may be tailored with respect to the energy applied to other regions, by cycling the valves 20 so that a desired program of gas flow "follows" movement of the region. For example, supposing there are two plenums 16a and 16b spaced apart from one another along the longitudinal dimension indicated by the arrow. A printing head 14 lays down a laterally extending region of print corresponding to a total drying area "TDA" which travels at the speed of the sheet 12. After having been imprinted, the region TDA arrives at the plenum 16a at a time equal to d₁ divided by the speed of the sheet, and the fast acting valve 20a is operated to effect a desired flow of the gas therethrough, according to a selected "program" of drying energy for the region TDA. Later, at a time equal to the quantity $(d_1 + d_2)$ divided by the speed of the sheet since the region TDA was printed, the region arrives at the plenum 16b, and the fast acting valve 20b is operated according to the same program. The program may provide for identical amounts of drying energy to be provided for the region TDA by each of the plenums, or it may provide for sequential attenuations of the drying energy, corresponding to the respective time delays in reaching the plenums, that take into account anticipated changes in the need for drying energy for drying the region as it moves downstream.--